

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Confirmation No.: 2794

**Bremer et al.**

Group Art Unit: 2611

Serial No.: 10/689,425

Examiner: Tse, Young Toi

Filed: October 20, 2003

Docket No.: 061606-1671

For: **PERFORMANCE CUSTOMIZATION SYSTEM AND PROCESS FOR OPTIMIZING  
xDSL PERFORMANCE**

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief under 37 C.F.R. § 41.37 is submitted in support of the Notice of Appeal filed December 5, 2008, responding to the Advisory Action mailed December 2, 2008 and the final Office Action mailed August 6, 2008.

It is not believed that extensions of time or fees are required to consider this Appeal Brief. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 20-0778.

**I. Real Party in Interest**

The real party in interest of the instant application is Paradyne Corporation, a Delaware corporation, having a principal place of business at 8545 126<sup>th</sup> Avenue North, Largo, FL 33773. Paradyne Corporation is a wholly-owned subsidiary of Zhone Technologies, Inc., a Delaware corporation, headquartered in Oakland, CA.

**II. Related Appeals and Interferences**

There are no known related appeals or interferences.

**III. Status of Claims**

Claims 2-4, 6, 8-13, and 37-40 stand finally rejected. Claims 1, 15-17, 19 and 23 have been canceled. Claims 14, 18, 20-22, 24-25, 28, 31-36, 47, and 50-72 have been indicated as allowable by the Advisory Action mailed December 2, 2008 and the final Office Action mailed August 6, 2008. The rejections of claims 2-4, 6, 8-13, and 37-40 are appealed.

**IV. Status of Amendments**

Claim 47 was amended in an after-final response filed on October 6, 2008 to overcome the claim objection in the final Office Action mailed August 6, 2008. The Advisory Action mailed December 2, 2008 states that the amendment will be entered for the purposes of appeal. No other amendments have been made subsequent to the final Office Action mailed August 6, 2008. The claims in the attached Claims Appendix (see below) reflect the present state of Appellants' claims.

## **V. Summary of Claimed Subject Matter**

The claimed inventions are summarized below with reference numerals and references to the written description ("specification") and drawings. The subject matter described in the following appears in the original disclosure at least where indicated, and may further appear in other places within the original disclosure.

Embodiments according to independent claim 2 describe a method of adjusting transmit performance parameters over a digital subscriber line (DSL). The method comprises the step of negotiating, with a second DSL modem, a limiting value of a first performance parameter (see e.g. Appellants' specification, page 7, lines 18-27, paragraph 0032). The method further comprises the step of receiving, from the second DSL modem, a signal exhibiting the first performance parameter (see e.g. Appellants' specification, page 8, lines 2-4, paragraph 0033). The method further comprises the step of determining a signal-to-noise-ratio for the received signal (see e.g. Appellants' specification, page 8, lines 4-6, paragraph 0033). The method further comprises the step of requesting, from the second DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter (see e.g. Appellants' specification, page 8, lines 19-30, paragraph 0035).

Embodiments according to independent claim 37 describe a receiving digital subscriber line (DSL) modem. The DSL modem comprises a demodulator in communication with a DSL (see e.g. Appellants' specification, page 5, line 27 through page 6, line 3, paragraph 0024 and FIG. 1). The DSL modem further comprises a memory (see e.g. Appellants' specification, FIG. 1, item 30). The DSL modem further comprises a central processing unit (CPU) in communication with the demodulator and the memory (see e.g. Appellants' specification, page 7, lines 11-12, paragraph 0031). The DSL modem further comprises a control program stored in the memory (see e.g. Appellants' specification, page 7, lines 12-13, paragraph 0031). The control program configured to negotiate, with a transmitting DSL modem, a limiting value of a

first performance parameter (see e.g. Appellants' specification, page 7, lines 18-27, paragraph 0032). The control program further configured to determine a signal-to-noise-ratio for a signal received from the transmitting DSL modem, the signal exhibiting the first performance parameter (see e.g. Appellants' specification, page 7, line 28 through page 8, line 6, paragraph 0033). The control program further configured to request, from the transmitting DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter (see e.g. Appellants' specification, page 8, lines 19-30, paragraph 0035).

#### **VI. Grounds of Rejection to be Reviewed on Appeal**

The following grounds of rejections are to be reviewed on appeal:

- A. Claims 2-4, 6, 9-12, and 37-40 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Goldstein* (U.S. Patent No. 5,265,151, hereafter "*Goldstein*") in view of *Gultekin et al.* (U.S. Patent No. 6,215,793, hereafter "*Gultekin*").
- B. Claim 8 has been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Goldstein* in view of *Gultekin* in further view of *Betts et al.* (U.S. Patent No. 5,682,378, hereafter "*Betts*").
- C. Claim 13 has been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Goldstein* in view of *Gultekin* in further view of *Archibald et al.* (U.S. Patent No. 5,369,703, hereafter "*Archibald*").

## VII. Arguments

For the reasons that follow, Appellants request that the rejections of claims 1-23 be overturned.

**A. Rejection of Claims 2-4, 6, 9-12, and 37-40 under 35 U.S.C. §103(a): *Goldstein* and *Gultekin***

**1. Appellants' Claim 2**

Appellants' claim 2 provides as follows (emphasis added):

A method of adjusting transmit performance parameters over a digital subscriber line (DSL), the method performed in a first DSL modem, the method comprising the steps of:  
***negotiating, with a second DSL modem, a limiting value of a first performance parameter;***  
receiving, from the second DSL modem, a signal exhibiting the first performance parameter;  
determining a signal-to-noise-ratio for the received signal; and  
requesting, from the second DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.

Appellants respectfully submit that independent claim 2 is allowable for at least the reason that *Goldstein* in view of *Gultekin* does not disclose, teach, or suggest at least the features recited and emphasized above in claim 2.

The Office Action acknowledges "Goldstein fails to teach or suggest a step of negotiating, with a second DSL modem and/or transmitting DSL modem, a limiting value of a first performance parameter" (Office Action, page 4).

The Office Action alleges "Gultekin ... teaches to negotiate a data rate for future transmission over a communication link (TL), a first transceiver (TRX1) proposes a limited number of data rate values to a second transceiver (TRX2). See abstract; col. 1, lines 9-14; col. 2, lines 17-31; and the description of Figure 1 from col. 5, line 30 to col. 8, line 14" (Office Action, page 4). As such, it appears that the Office Action alleges that proposing a limited

number of data rate values corresponds to "negotiating, with a second DSL modem, a limiting value of a first performance parameter". Specifically, *Gultekin* teaches:

This object is realised by an initialisation protocol to be executed by a first transceiver and a second transceiver to negotiate a data rate for future data transmission over a communication link which is coupled between the first transceiver and the second transceiver, the initialisation protocol containing a first phase wherein at least the first transceiver proposes a limited amount of data rate values for the data rate; a third phase wherein it is communicated which one of the data rate values is selected for the data rate; and a fourth phase wherein it is confirmed that the selected one of the data rate values will become the data rate for future transmission, wherein before the fourth phase is executed, the first transceiver or the second transceiver announces a new data rate proposal, whereupon the first phase is re-executed.

(Col. 2, lines 17-31). However, Appellants respectfully submit that a limited number of values for a parameter (data rate) for future data transmission is not "a limiting value" of a parameter. Further, Appellants respectfully submit that proposing a limited amount of data rate values for the data rate is not the same as "negotiating... a limiting value of" the data rate. As such, *Goldstein* in view of *Gultekin* does not disclose or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2.

The Advisory Action alleges that "the limited number of values for data rate parameter is covered and in the scope of the limiting value of a parameter" (Advisory Action at page 2). Appellants respectfully disagree. Neither *Goldstein* nor *Gultekin* teach or suggest that a proposed data rate value is the limiting value of the data rate. Thus, *Goldstein* in view of *Gultekin* does not disclose or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2.

Therefore, for at least the reasons described above, the proposed combination of *Goldstein* and *Gultekin* fails to disclose, teach or suggest all of the features recited in amended claim 2. Thus, Appellants respectfully request that the rejection of claim 2 be overturned.

**2. Appellants' Claims 3-4, 6, and 9-12**

Since independent claim 2 is allowable, Appellants respectfully submit that claims 3-4, 6, and 9-12 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir.1988). Therefore, Appellants respectfully request that the rejection of claims 3-4, 6, and 9-12 be overturned.

**3. Appellants' Claim 37**

Appellants' claim 37 provides as follows (emphasis added):

A receiving digital subscriber line (DSL) modem comprising:  
a demodulator in communication with a DSL;  
a memory;  
a central processing unit (CPU) in communication with the demodulator and the memory; and  
a control program stored in the memory, ***the control program configured to:***  
***negotiate, with a transmitting DSL modem, a limiting value of a first performance parameter,***  
determine a signal-to-noise-ratio for a signal received from the transmitting DSL modem, the signal exhibiting the first performance parameter; and  
request, from the transmitting DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.

Appellants respectfully submit that independent claim 37 is allowable for at least the reason that *Goldstein* in view of *Gultekin* does not disclose, teach, or suggest at least the features recited and emphasized above in claim 37.

The Office Action acknowledges "Goldstein fails to teach or suggest a step of negotiating, with a second DSL modem and/or transmitting DSL modem, a limiting value of a first performance parameter" (Office Action, page 4).

The Office Action alleges "Gultekin ... teaches to negotiate a data rate for future transmission over a communication link (TL), a first transceiver (TRX1) proposes a limited number of data rate values to a second transceiver (TRX2). See abstract; col. 1, lines 9-14; col. 2, lines 17-31; and the description of Figure 1 from col. 5, line 30 to col. 8, line 14" (Office

Action, page 4). As such, it appears that the Office Action alleges that proposing a limited number of data rate values corresponds to "negotiat[ing], with a transmitting DSL modem, a limiting value of a first performance parameter". Specifically, *Gultekin* teaches:

This object is realised by an initialisation protocol to be executed by a first transceiver and a second transceiver to negotiate a data rate for future data transmission over a communication link which is coupled between the first transceiver and the second transceiver, the initialisation protocol containing a first phase wherein at least the first transceiver proposes a limited amount of data rate values for the data rate; a third phase wherein it is communicated which one of the data rate values is selected for the data rate; and a fourth phase wherein it is confirmed that the selected one of the data rate values will become the data rate for future transmission, wherein before the fourth phase is executed, the first transceiver or the second transceiver announces a new data rate proposal, whereupon the first phase is re-executed.

(Col. 2, lines 17-31). However, Appellants respectfully submit that a limited number of values for a parameter (data rate) for future data transmission" is not "a limiting value" of a parameter. Further, Appellants respectfully submit that proposing a limited amount of data rate values for the data rate is not the same as "negotiating... a limiting value of" the data rate. As such, *Goldstein* in view of *Gultekin* does not disclose or suggest "the control program configured to: negotiate, with a transmitting DSL modem, a limiting value of a first performance parameter" as recited in claim 37.

The Advisory Action alleges that "the limited number of values for data rate parameter is covered and in the scope of the limiting value of a parameter" (Advisory Action at page 2). Appellants respectfully disagree. Neither *Goldstein* nor *Gultekin* teach or suggest that a proposed data rate value is the limiting value of the data rate. Thus, *Goldstein* in view of *Gultekin* does not disclose or suggest "the control program configured to: negotiate, with a transmitting DSL modem, a limiting value of a first performance parameter" as recited in claim 37.

Therefore, for at least the reasons described above, the proposed combination of *Goldstein* and *Gultekin* fails to disclose, teach or suggest all of the features recited in amended claim 37. Thus, Appellants respectfully request that the rejection of claim 37 be overturned.



**4. Appellants' Claims 38-40**

Since independent claim 37 is allowable, Appellants respectfully submit that claims 38-40 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir.1988). Therefore, Appellants respectfully request that the rejection of claims 38-40 be overturned.

**B. Rejection of Claim 8 under 35 U.S.C. §103(a): *Goldstein*, *Gultekin*, and *Betts***

For the reasons discussed with regard to claim 2 in section A.1 above, *Goldstein* in view of *Gultekin* does not teach or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2. The addition of *Betts* does not overcome this deficiency. Rather, *Betts* discloses "a transmitting modem ... with the ability to cancel far listener echo" (col.1, lines 33-34). The Office Action alleges that "it would have been obvious to one of ordinary skill in the art that the error rate of the first performance parameter in Goldstein's receiver of the transmitting modem is transmit data rate as taught by Betts" (Office Action, page 9). Appellants respectfully disagree. Specifically, *Betts* teaches that "cancell[ing] the far listener echo ... results in an improved SNR for the receiver of the transmitting modem, thus allowing higher data rates or reduced error rates" (col. 1, lines 32-36). As such, *Betts* teaches that data rates and error rates are not the same as alleged. Thus, *Betts* does not disclose or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2.

Because independent claim 2 is allowable over *Goldstein* in view of *Betts*, Appellants respectfully submit that claim 8 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claim 8 be overturned.

**C. Rejection of Claim 13 under 35 U.S.C. §103(a): *Goldstein*, *Gultekin*, and *Archibald***

For the reasons discussed with regard to claim 2 in section A.1 above, *Goldstein* in view of *Gultekin* does not teach or suggest “negotiating, with a second DSL modem, a limiting value of a first performance parameter” as recited in claim 2. The addition of *Archibald* does not overcome this deficiency. While, *Archibald* discloses “Commands sent from one modem to another using a secondary channel are sent at a rate much slower than the primary channel data rate” (col. 1, lines 15-18), *Archibald* does not teach or suggest “a limiting value of a first performance parameter”, much less “negotiating, with a second DSL modem, a limiting value of a first performance parameter” as recited in claim 2.

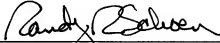
Because independent claim 2 is allowable over *Goldstein* in view of *Archibald*, Appellants respectfully submit that claim 13 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Appellants respectfully request that the rejection of claim 13 be overturned.

**VIII. Conclusion**

In summary, it is Appellants' position that Appellants' claims are patentable over the applied cited art references and that the rejection of these claims should be overturned. Appellants therefore respectfully request that the Board of Appeals overturn the Examiner's rejection and allow Appellants' pending claims.

Respectfully submitted,

By:

  
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**IX. Claims Appendix under 37 C.F.R. § 41.37(c)(1)(viii)**

The following are the claims that are involved in this Appeal.

1. (Canceled)
2. A method of adjusting transmit performance parameters over a digital subscriber line (DSL), the method performed in a first DSL modem, the method comprising the steps of:
  - negotiating, with a second DSL modem, a limiting value of a first performance parameter;
  - receiving, from the second DSL modem, a signal exhibiting the first performance parameter;
  - determining a signal-to-noise-ratio for the received signal; and
  - requesting, from the second DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.
3. The method of claim 2, further comprising the step of:
  - receiving, from the second DSL modem, a second signal exhibiting the first performance parameter and the adjustment in the second performance parameter.
4. The method of claim 2, wherein the second performance parameter is transmit power level.
5. The method of claim 2, wherein the second performance parameter is transmit data rate.
6. The method of claim 2, wherein said negotiating step is performed after the receiving step and before the determining step.
7. The method of claim 6, wherein said second performance parameter is transmit data rate and said first performance parameter is transmit power level.
8. The method of claim 6, wherein said second performance parameter is transmit power level and said first performance parameter is transmit data rate.
9. The method of claim 2, further comprising the step of:
  - selecting the second performance parameter from a plurality of possible performance parameters.

10. The method of claim 2, further comprising the step of:  
repeating the receiving, determining and requesting steps until the first performance parameter of the received signal is marginally supported.
11. The method of claim 2, further comprising the step of:  
repeating, using the negotiated value for the first performance parameter, the receiving, determining and requesting steps until the received signal marginally supports the adjustment to the second performance parameter.
12. The method of claim 2, wherein the received signal comprises a plurality of sub-bands, each sub-band transmitted at a transmit power level.
13. The method of claim 2, wherein receiving the signal is over a primary channel and requesting the adjustment is over a secondary channel.
14. A receiving digital subscriber line (DSL) modem comprising:  
means for receiving, from a transmitting DSL modem, a signal exhibiting a first performance parameter;  
means for negotiating, with the transmitting DSL modem, a value for the first performance parameter;  
means for determining a signal-to-noise-ratio for the received signal; and  
means for requesting, from the transmitting DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is transmit data rate, and wherein the second performance parameter is different from the first performance parameter.
- 15-17. (Canceled)
18. The receiving DSL modem of claim 14, wherein said first performance parameter is transmit power level.
19. (Canceled)
20. The receiving DSL modem of claim 14, further comprising:  
means for selecting the first performance parameter from a plurality of possible performance parameters.

21. The receiving DSL modem of claim 14, further comprising:  
means for receiving, from the transmitting DSL modem, a signal comprising a plurality of sub-bands, each sub-band transmitted at a transmit power level; and  
means for determining a signal-to-noise-ratio for a sub-band in the received signal.
22. A system for adjusting transmit performance parameters over a digital subscriber line (DSL) comprising:  
means for negotiating, with a DSL modem, a criteria for a first performance parameter;  
means for receiving, from the DSL modem, a signal exhibiting the first performance parameter, wherein the means for receiving comprises means for receiving a signal comprising a plurality of sub-bands, each sub-band transmitted at a transmit power level;  
means for determining a signal-to-noise-ratio for the received signal; and  
means for requesting, from the DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.
23. (Canceled)
24. The system of claim 22, wherein the means for determining comprises means for determining a signal-to-noise-ratio for a sub-band of the received signal.
25. The system of claim 24, wherein the means for requesting comprises means for requesting an adjustment in the second performance parameter associated with the sub-band of the received signal.
26. The method of claim 12, wherein the determining step comprises determining a signal-to-noise-ratio for a sub-band of the received signal.
27. The method of claim 26, wherein the requesting step comprises requesting an adjustment in the second performance parameter associated with the sub-band of the received signal.
28. The system of claim 22, wherein the criteria for the first performance parameter is a limiting criteria.
29. The method of claim 2, wherein the limiting value of the first performance parameter is a minimum value.

30. The receiving DSL modem of claim 14, wherein the value for the first performance parameter is a limiting value.

31. A method of adjusting transmit performance parameters over a digital subscriber line (DSL), the method performed in a first DSL modem, the method comprising the steps of:  
negotiating, with a second DSL modem, a value for a first performance parameter;  
receiving, from the second DSL modem, a signal exhibiting the first performance parameter, wherein the received signal comprises a plurality of sub-bands, each sub-band transmitted at a transmit power level;  
determining a signal-to-noise-ratio for the received signal; and  
requesting, from the second DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.

32. The method of claim 31, wherein the determining step comprises determining a signal-to-noise-ratio for a sub-band of the received signal.

33. The method of claim 32, wherein the requesting step comprises requesting an adjustment in the second performance parameter associated with the sub-band of the received signal.

34. The method of claim 31, further comprising the step of:  
repeating the receiving, determining and requesting steps until the first performance parameter of the received signal is marginally supported.

35. (Previously Presented) The method of claim 31, further comprising the step of:  
repeating, using the negotiated value for the first performance parameter, the receiving, determining and requesting steps until the received signal marginally supports the adjustment to the second performance parameter.

36. The method of claim 31, wherein the second performance parameter is transmit data rate.

37. A receiving digital subscriber line (DSL) modem comprising:  
a demodulator in communication with a DSL;  
a memory;  
a central processing unit (CPU) in communication with the demodulator and the memory; and  
a control program stored in the memory, the control program configured to:  
negotiate, with a transmitting DSL modem, a limiting value of a first performance parameter;  
determine a signal-to-noise-ratio for a signal received from the transmitting DSL modem, the signal exhibiting the first performance parameter; and  
request, from the transmitting DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.
38. The receiving DSL modem of claim 37, wherein the control program is further configured to select the second performance parameter from a plurality of possible performance parameters.
39. The receiving DSL modem of claim 37, wherein the control program is further configured to determine a signal-to-noise-ratio for a sub-band in the received signal, wherein the sub-band is transmitted at an associated transmit power level.
40. The receiving DSL modem of claim 39, wherein the control program is further configured to request, from the transmitting DSL modem, an adjustment in the second performance parameter associated with the sub-band of the received signal.
41. The receiving DSL modem of claim 37, wherein the control program is further configured to:  
receive, from the transmitting DSL modem, a second signal exhibiting the first performance parameter and the adjustment in the second performance parameter.
42. The receiving DSL modem of claim 37, wherein the second performance parameter is transmit power level.
43. The receiving DSL modem of claim 42, wherein said first performance parameter is transmit data rate.



44. The receiving DSL modem of claim 37, wherein the second performance parameter is transmit data rate.
45. The receiving DSL modem of claim 44, wherein said first performance parameter is transmit power level.
46. The receiving DSL modem of claim 37, wherein the control program is further configured to:
- repeat the determining and requesting steps until the first performance parameter of the received signal is marginally supported.
47. The receiving DSL modem of claim 37, wherein the control program is further configured to:
- repeat, using the negotiated limiting value for the first performance parameter, the determining and requesting steps until the received signal marginally supports the adjustment to the second performance parameter.
48. The receiving DSL modem of claim 37, wherein the signal is received over a primary channel and the adjustment is requested over a secondary channel.
49. The method of claim 27, further comprising the step of:
- receiving, from the second DSL modem, a second signal exhibiting the first performance parameter and the adjustment in the second performance parameter associated with the sub-band.
50. The receiving DSL modem of claim 21, where in the means for requesting comprises means for requesting an adjustment in the second performance parameter associated with the sub-band of the received signal.
51. The receiving DSL modem of claim 50, further comprising:
- means for receiving, from the transmitting DSL modem, a second signal exhibiting the first performance parameter and the adjustment in the second performance parameter associated with the sub-band.
52. The receiving DSL modem of claim 30, wherein the limiting value for the first performance parameter is a maximum value.

53. The receiving DSL modem of claim 14, wherein the signal is received over a primary channel and the adjustment is requested over a secondary channel.
54. The system of claim 25, further comprising:  
means for receiving, from the DSL modem, a second signal exhibiting the first performance parameter and the adjustment in the second performance parameter associated with the sub-band.
55. The system of claim 28, wherein the limiting criteria for the first performance parameter is a maximum value.
56. The system of claim 22, wherein the signal is received over a primary channel and the adjustment is requested over a secondary channel.
57. The method of claim 31, wherein the second performance parameter is transmit power level.
58. The method of claim 31, wherein said negotiating step is performed after the receiving step and before the determining step.
59. The method of claim 58, wherein said second performance parameter is transmit data rate and said first performance parameter is transmit power level.
60. The method of claim 58, wherein said second performance parameter is transmit power level and said first performance parameter is transmit data rate.
61. The method of claim 31, further comprising the step of:  
selecting the second performance parameter from a plurality of possible performance parameters.
62. The method of claim 31, wherein the signal is received over a primary channel and the adjustment is requested over a secondary channel.

63. A method of adjusting transmit performance parameters over a digital subscriber line (DSL), the method performed in a first DSL modem, the method comprising the steps of:  
negotiating, with a second DSL modem, a value for a first performance parameter;  
receiving, from the second DSL modem, a signal exhibiting the first performance parameter;  
determining a signal-to-noise-ratio for the received signal; and  
requesting, from the second DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is transmit data rate, and wherein the second performance parameter is different from the first performance parameter.
64. The method of claim 63, further comprising the step of:  
receiving, from the second DSL modem, a second signal exhibiting the first performance parameter and the adjustment in the second performance parameter.
65. The method of claim 63, wherein said negotiating step is performed after the receiving step and before the determining step.
66. The method of claim 65, wherein said first performance parameter is transmit power level.
67. The method of claim 63, further comprising the step of:  
repeating the receiving, determining and requesting steps until the first performance parameter of the received signal is marginally supported.
68. The method of claim 63, further comprising the step of:  
repeating, using the negotiated value for the first performance parameter, the receiving, determining and requesting steps until the received signal marginally supports the adjustment to the second performance parameter.
69. The method of claim 63, wherein the received signal comprises a plurality of sub-bands, each sub-band transmitted at a transmit power level.
70. The method of claim 69, wherein the determining step comprises determining a signal-to-noise-ratio for a sub-band of the received signal.

71. The method of claim 70, wherein the requesting step comprises requesting an adjustment in the second performance parameter associated with the sub-band of the received signal.

72. The method of claim 63, wherein receiving the signal is over a primary channel and requesting the adjustment is over a secondary channel.

**X. Evidence Appendix under 37 C.F.R. § 41.37(c)(1)(ix)**

None.

**XI. Related Proceedings Appendix under 37 C.F.R. § 41.37(c)(1)(x)**

None.